638. 标题: Electromagnetically induced transparency in terahertz plasmonic metamaterials via dual excitation pathways of the dark mode

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摘要: We observe the excitation and tuning of electromagnetically induced transparency (EIT) by the interference between different excitation pathways of the dark mode in a planar terahertz metamaterial. The EIT unit cell consists of a cut wire as the bright resonator and a pair of split ring resonators (SRRs) as the dark element. The dark mode resonance is excited by both the electric and magnetic fields when the SRR pair translates along the wire without altering the lateral distance between the resonators. The electric and magnetic pathways of exciting the dark mode allows for a giant amplitude modulation of the EIT resonance. (C) 2012 American Institute of Physics. [http://dx.doi.org/10.1063/1.3696306]

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